	Application No.	Applicant(s)
Notice of Allowability	10/667,009	GILMARTIN ET AL.
	Examiner	Art Unit
	HIEU T. HOANG	2452

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *communication filed on 02/12/2009*.

2. ☒ The allowed claim(s) is/are *11, 16-29*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the
           International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
    of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
    Paper No./Mail Date *03/31/2009* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Kenny S Lin/
Primary Examiner, Art Unit 2452

DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Anne D. Barry on 03/31/2009.

The claims have been amended as follows:

16.   (Currently Amended) A system for providing Ethernet VLAN capacity requirement

estimation, the system comprising:

         a storage device storing a VLAN database;

         a host system in communication with [[a]] said storage device; ~~including a VLAN~~

~~database~~ and said host system in communication with a user system via a network, said

host system including application software to implement a method comprising:

         receiving a VLAN stored in said VLAN [[databases]] database, said VLAN

including VLAN access ports, VLAN switches and VLAN trunks, wherein said VLAN

access ports include VLAN bandwidth requirements and VLAN class of service and said

VLAN trunks include VLAN capacity counters and VLAN threshold parameters;

receiving a target access port via said network, said target access port including a target class of service and a target bandwidth requirement from a requestor using said user system;

determining a target trunk and target switch corresponding to said target access port, wherein said target trunk corresponds to one of said VLAN trunks and said target switch corresponds to one of said VLAN switches;

calculating a bandwidth contribution of said target access port to said VLAN, said calculating responsive to said VLAN trunks, said VLAN switches, said VLAN access ports, and said target access port; and

transmitting said bandwidth contribution via said network to said requestor;

wherein said calculating the bandwidth contribution of said target access port to said VLAN includes:

splitting said VLAN into two portions based on the location of said VLAN switches relative to said target trunk, wherein one portion includes said target access port and is an access port side and the other portion is a non-access port side;

calculating a current access port side bandwidth requirement responsive to said VLAN;

calculating a potential access port side bandwidth requirement responsive to said VLAN and to said target access port;

calculating a current non-access port bandwidth requirement responsive to said VLAN; and

determining said bandwidth contribution of said target access port by subtracting the minimum of said current access port side bandwidth requirement compared to said current non-access port bandwidth requirement from the minimum of said potential access port side bandwidth requirement compared to said current non-access port bandwidth requirement.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Claims 11, 16-29 are allowed. The prior art of record does not teach the claimed invention, as follows.

For each of independent claims 11, 16 and 20, the prior art does not teach or render obvious the followings:

"calculating a bandwidth contribution of said target access port to said VLAN includes: splitting said VLAN into two portions based on the location of said VLAN switches relative to said target trunk, wherein one portion includes said target access port and is an access port side and the other portion is a non-access port side; calculating a current access port side bandwidth requirement responsive to said VLAN; calculating a potential access port side bandwidth requirement responsive to said VLAN and to said target access port; calculating a current non-access port bandwidth requirement responsive to said VLAN; and determining said bandwidth contribution of said target access port by subtracting the minimum of said current access port side bandwidth requirement compared to said current non-access port

bandwidth requirement from the minimum of said potential access port side bandwidth requirement compared to said current non-access port bandwidth requirement".

The claimed limitations above provides a method/system for VLAN capacity requirement estimation, wherein a bandwidth contribution of a target access port is calculated based on a least contribution algorithm to reflect an impact of provisioning an access port with respect to a trunk capacity, taking into account bandwidth of the port, class of service of the VLAN and placement of the port within the VLAN.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is included in form PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Kenny S Lin/

Primary Examiner, Art Unit 2452